



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/743,570	12/22/2003	Garrett N. Ford	122142.00008	7975

34282 7590 01/06/2006

QUARLES & BRADY STREICH LANG, LLP
ONE SOUTH CHURCH AVENUE
SUITE 1700
TUCSON, AZ 85701-1621

EXAMINER

NGUYEN, SON T

ART UNIT PAPER NUMBER

3643

DATE MAILED: 01/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.



UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents
United States Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450
www.uspto.gov

MAILED

JAN 06 2006

GROUP 3600

**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/743,570
Filing Date: December 22, 2003
Appellant(s): FORD, GARRETT N.

Gavin Milczarek-Desai
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 10/28/05 appealing from the Office action
mailed 6/10/05.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

No amendment after final has been filed.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

No evidence is relied upon by the examiner in the rejection of the claims under appeal.

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 102

Claims 13 & 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Bowman (US 3515417).

Claim Rejections - 35 USC § 103

Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hsi-Chang (6220004) in view of Bowman (3515417).

Claims 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bowman (as above).

(10) Response to Argument

Appellant argued that for claims 13-14, by the PTO's reasoning, whenever a bushing is inserted in an element, the element is automatically transformed into part of the bushing. This reasoning is obviously erroneous since an element which receives a bushing is generally incapable of functioning as a bushing due to its configuration and/or due to the fact that the material constituting the element is unsuitable for use in a bushing.

MPEP Section 2114 [R-1] states that "APPARATUS CLAIMS MUST BE STRUCTURALLY DISTINGUISHABLE FROM THE PRIOR ART", which in Appellant's case, it is not. Appellant's apparatus claims have nothing that are structurally distinguishable from Bowman's teaching because, both Appellant and Bowman teach a bushing comprising an inner sleeve (ref. 16 in Bowman's), an outer sleeve (ref. 111a,b in Bowman's), substantially concentric with the inner sleeve, and a plurality of longitudinal ribs (ref. 18 in Bowman's), connecting the inner and outer sleeves.

MPEP Section 2114 also states that "MANNER OF OPERATING THE DEVICE DOES NOT DIFFERENTIATE APPARATUS CLAIM FROM THE PRIOR ART", which, again, Appellant's invention is not. Intended use of a device does not differentiate the device from the prior art of Bowman when Bowman teaches all the structural limitations as discussed above, therefore, the recitation of "for a stirrup holding member" with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus.

Appellant argued that claim 14 sets forth that the inner sleeve, ribs and outer sleeve are an integral unitary structure. The phrase "integral unitary structure" indicates that the inner sleeve, ribs and outer sleeve are of one piece which is not the case for the hub 11a,11b and the bushing 14 of Bowman.

"Integral unitary structure" is taken to mean a whole unit, therefore, the inner sleeve, outer sleeve (ref. 11a,b) and ribs of Bowman, together, form a whole unit making up the bushing.

Appellant argued that it is abundantly clear that the unthreaded bushing of Bowman is not the functional equivalent of the threaded screw 66 and threaded nuts 72,74 constituting part of the connection assembly 64 of Hsi-chang. Unlike the screw 66 and nuts 72,74 of Hsi-chang, the bushing of Bowman is incapable of limiting relative rotation of the eye 58 and carrier 14,16 of Hsi-chang. Hence, it cannot be obvious to replace the connection assembly 64 of Hsi-Chang with the bushing of Bowman.

Chang's bushing limits rotation to a certain degree, i.e. beyond the position of perpendicularity of the upper foot surface 28 and the carrier plane, and not completely eliminate rotation-limiting function. Merely replacing one type of bushing (Chang's) with another type of bushing (Bowman's) would be obvious functional equivalent. A bushing is there to guide or reduce friction between two elements, thus, both types of bushing of Chang and Bowman perform the same intended function of a bushing so replacing one with the other does not modified the invention of Chang or Bowman.

Appellant argued that claim 3 recites that the bushing is made of polyurethane. The appellant does not find any disclosure in Bowman that would lead one of ordinary skill in the art to make a bushing out of this material.

From the cross section (see fig. 4) of Bowman, Bowman teaches a plastic material. Polyurethane is a notoriously well known polymer used in variety of plastic material. Therefore, employing a known material such as polyurethane to manufacture the bushing of Bowman would have been obvious to one having ordinary skill in the art at the time the invention was made on the basis of its suitability for the intended use (abundance material and cheap).

Appellant argued that claim 17 sets forth that the inner and outer sleeves are connected to one another by four ribs. While the PTO is of the opinion that it would be obvious to make the bushing of Bowman with four ribs depending upon the guidance or reduction in friction one wished to obtain, this is not the case. This [self-centering] teaching, together with Fig. 4 of the reference which shows that the splines deflect by different amounts circumferentially of the hub 1 1a, 1 lb,

Art Unit: 3643

leads to the conclusion that the bushing of Bowman requires substantially more than four splines in order to be self-centering as intended by Bowman. Thus, it appears that four splines would not allow the bushing to properly adjust to the irregularities of an unmachined bore circumferentially of the bore.

One can have four wide enough ribs or splines to cover the circumference of the hub to self center the device. Bowman teaches more than four splines or ribs 18 as shown in fig. 4, to increase frictional force between the inner sleeve and outer sleeve. However, if one wishes to not increase frictional force between the sleeves, one can have less number of splines or ribs 18, which ribs have to be made wider in width for self centering. The number of splines or ribs would depend on the amount of frictional force one wishes to have between sleeves.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Son T. Nguyen 

Conferees:

Peter Poon 

Robert Swiatek 